Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P 6090 PCT KE/bau	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/003500	International filing date *(day/month/year)* 02.04.2004	Priority date *(day/month/year)* 02.04.2003

International Patent Classification (IPC) or national classification and IPC

Applicant ROCK TECHNOLOGIES LIMITED

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of **15** sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

   a. ☐ *(sent to the applicant and to the International Bureau)* a total of _____ sheets, as follows:

   ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

   ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s))

   _____ , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

   ☒ Box No. I   Basis of the report

   ☒ Box No. II   Priority

   ☐ Box No. III   Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

   ☐ Box No. IV   Lack of unity of invention

   ☒ Box No. V   Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

   ☐ Box No. VI   Certain documents cited

   ☐ Box No. VII   Certain defects in the international application

   ☒ Box No. VIII   Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

Box No. I	Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

    ☐ This report is based on translations from the original language into the following language _____ , which is the language of a translation furnished for the purposes of:

      ☐ international search (Rule 12.3 and 23.1(b))

      ☐ publication of the international application (Rule 12.4)

      ☐ international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

    ☐ the international application as originally filed/furnished

    ☒ the description:

      pages   __1-18_____ as originally filed/furnished

      pages* _____ received by this Authority on _____

      pages* _____ received by this Authority on _____

    ☒ the claims:

      nos.   __1-21_____ as originally filed/furnished

      nos.* _____ as amended (together with any statement) under Article 19

      nos.* _____ received by this Authority on _____

      nos.* _____ received by this Authority on _____

    ☒ the drawings:

      sheets   __1/1_____ as originally filed/furnished

      sheets* _____ received by this Authority on _____

      sheets* _____ received by this Authority on _____

    ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

      ☐ the description, pages _____

      ☐ the claims, nos. _____

      ☐ the drawings, sheets/figs _____

      ☐ the sequence listing *(specify)*: _____

      ☐ any table(s) related to sequence listing *(specify)*: _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

      ☐ the description, pages _____

      ☐ the claims, nos. _____

      ☐ the drawings, sheets/figs _____

      ☐ the sequence listing *(specify)*: _____

      ☐ any table(s) related to sequence listing *(specify)*: _____

*   *If item 4 applies, some or all of those sheets may be marked "superseded."*

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/003500

Box No. II	Priority

1. ☒ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:

    ☒ copy of the earlier application whose priority has been claimed (Rule 66.7(a)).

    ☐ translation of the earlier application whose priority has been claimed (Rule 66.7(b)).

2. ☐ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rule 64.1). Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

| Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |

1. Statement

Novelty (N)	Claims	1-21	YES
	Claims		NO
Inventive step (IS)	Claims	2-4, 6-9	YES
	Claims	1, 5, 10-21	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The applicant was advised in the previous report that any amendments to the application must be made at least one month prior to the expiry of the official deadline for publication of the international examination report, and that the only alternative would be for the applicant to agree to a later publication of the preliminary examination report. However, the applicant has not made use of this option and no amendments have been made to the application either.

1   The present report refers to the following documents:

D1:   MYUNGHWA KANG ET AL: "WEBIO library for executing application programs on the Internet" TENCON 99. PROCEEDINGS OF THE IEEE REGION 10 CONFERENCE CHEJU ISLAND, SOUTH KOREA 15-17 SEPT. 1999, PISCATAWAY, NJ, USA, IEEE, US, 15 September 1999 (1999-09-15), pages 1510-1513, XP010368555 ISBN: 0-7803-5739-6

D2:   ANONYMOUS: "Host Links and Gweb 6.0.0 production version is available!" GALLAGHER AND ROBERTSON NEWS FLASH, [Online] 2 April 2001 (2001-04-02), XP002306844 found on the Internet: URL: http://www.gar.no/news/3ac878f9.htm> [found on

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

2004-11-22]

D5:   US 2001/032254 A1 (HAWKINS JEFFREY) 18 October 2001 (2001-10-18)

D6:   WO 01/88761 A (INNOVATIVE COMM TECHNOLOGIES I; JACOBSON JEFFREY RICHARD (US); MCCONN) 22 November 2001 (2001-11-22)

D7:   WO 00/46669 A (GUYER KAY A; HASSON MARC B (US); MENTAT INC (US); PALTER DAVID C (US)) 10 August 2000 (2000-08-10)

D9:   WO 01/08378 A (CITRIX SYSTEMS INC) 1 February 2001 (2001-02-01)

D10:   RAGGETT D ET AL: "HTML 4.0 Specification, CHAPTER 17, FORMS" HTML 4.0 SPECIFICATION, [Online] 24 April 1998 (1998-04-24), pages 219-250, XP002306842 found on the Internet: URL: http://www.w3.org/TR/1998/REC-html40-1 9980424/html40.pdf> [found on 2004-11-22]

D11:   ANONYMOUS: "Automatically jumping to the next field" IDOCS GUIDE TO HTML, [Online] 31 December 2002 (2002-12-31), XP002306862 found on the Internet: URL:www.idocs.com/tags/forms/index_famsupp_162.htm l> [found on 2004-11-18]

D14:   ANONYMOUS: "CGI COMMON GATEWAY INTERFACE" CGI COMMON GATEWAY INTERFACE, [Online] 13 October 1999 (1999-10-13), XP002306843 found on the Internet: URL: http://www.w3.org/CGI/> [found on 2004-11-22]

2   INDEPENDENT CLAIM 1

2.1   The present application does not meet the requirements of PCT Article 33(1) because the

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

subject matter of claim 1 does not involve an inventive step (PCT Article 33(3)).

Preliminary remark: The characterisation of the method as a "method for reducing the latency during [...further technical features]" has a restrictive effect only to the extent that a method known from the prior art must be suitable for achieving the intended effect.

The Examining Authority is of the opinion that the content of claim 1 is a direct implementation of techniques that are generally known to a person skilled in the art.

One generally known and standard technique for implementing interactive applications via the Internet is the use of an HTTP server with a CGI interface for existing applications, wherein, typically, HTML forms are generated which are transferred to a client; cf. the definition of CGI by the WWW consortium (D14, first 5 lines of the page). The standard characteristics of HTML forms are known to a person skilled in the art from D10.

D1 is an example of this standard technique (see figure 1). D1 use HTML forms for communication; HTML forms have been standardised by the WWW consortium (see D10).

D1 discloses (the references in parentheses relate to said document):

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

A method for reducing the latency during interactive data communication between a terminal server and a terminal server client connected to one another via a telecommunications network (cf. D1, figure 2, HTML forms are sent by the server to the client. Normally, users complete forms before they are returned in a block to the server (implicit characteristic of an HTML form, cf. D10, page 219, chapter 17.1 "Introduction to forms", "Users generally complete a form by modifying its controls (entering text, selecting menu items [...]) before submitting the form to an agent for processing (e.g. to a Web server [...]")

wherein a data processing program is carried out on the terminal server, said program generating, as a function of commands and data inputted via an input medium connected to the terminal server client, screenshots of an interactive user program with a plurality of data windows, said screenshots being transferred in the form of data packets to the terminal server client and being displayed by the latter on a display medium (see D1, figure 2, operations 2-4),

wherein the input, via the input medium, of further data into an accompanying data field executed according to a processing sequence predetermined by parameters is signalled on the display medium by an input command (implicit characteristic of an HTML form, cf. D10, page 219, section 17.11 "Giving focus to an element", in

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particular 17.11.1 "Tabbing Navigation", above all
TABINDEX attribute)

which are transmitted in the form of further data
packets via the telecommunications network to the
terminal server (see D1, figure 2, operations 2-4)

with the further features that

the parameters for the sequence in which the data
fields are processed are transmitted via the
telecommunications network to the terminal server
client (TABINDEX attribute within a form fixes the
processing sequence, see D10, page 219, section
17.11 "Giving focus to an element", in particular
17.11.1 "Tabbing Navigation", above all TABINDEX
attribute).

and that an independent program routine is
executed on the terminal server client (cf. D1,
figure 1, Web Browser) which, when predetermined
commands are inputted via the input medium,
automatically alters the screenshot as a function
of the parameters for the processing sequence in
such a way that the input command within a data
field is moved into the next or previous data
field according to the processing sequence
(implicit characteristic of an HTML form, cf. D10,
page 219, section 17.11 "Giving focus to an
element", in particular 17.11.1 "Tabbing
Navigation", above all TABINDEX attribute).

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

A person skilled in the art proceeding from D1 and using generally known characteristics of HTML forms (cf. D10) would therefore arrive at the subject matter of claim 1. Since the tabbing function is carried out by the browser software installed by the client, the user does not experience any impairment caused by possible network latencies.

D2 shows an alternative means of arriving at the subject matter of claim 1. The software Gweb described in D2 shows a terminal emulation wherein a web browser is used on the client side. Gweb allows scripts to be incorporated which in turn allow user input to be locally processed without the corresponding data being sent to the host (D2, page 3 of the document, first paragraph: "With Gweb version 6.0 you can also use an externally defined script or program to process input data from the browser …return HTML to the browser" and the paragraph further down the page concerning **JavaScript** functions, which explicitly mentions the feature **Auto tabbing**).

Attention is also drawn to D11. D11 discloses the use of Java Code in HTML forms to offer assistance during input. This code is executed locally on the client. In D1, using Java Code, the cursor is placed in the next field without the user doing anything (Auto Tabbing).

3   DEPENDENT CLAIMS 5, 10-21

| Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |

Claims 5 and 10-21 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT inventive step requirements.

Claims 5, 10-13, 14 and 15 are features known to a person skilled in the art. Claim 5 contains simple formatting features that are standard for HTML documents. Claims 10-13 describe control elements which (a) are contained as standard in HTML forms (D10, page 230, section 17.6 "The Select, Optgroup, and Option elements") or can be implemented in a manner well-known to a person skilled in the art using Java or other interpreter or script languages. Claims 14 and 15 also relate to standard measures in the art.

Claims 16-21 arise from a non-inventive combination of documents D5, D6 or D7. The claims relate to a simple combination of known features, since the problem addressed by claim 1 is to be solved independently of the problem addressed by claims 16-21.

4   DEPENDENT CLAIMS 2, 10-13

The combination of features contained in the dependent claims is neither known nor obvious from the available prior art. The reasons for this are as follows:

Claim 2 specifies that the screenshots are generated by a window program routine of the operating system of the terminal server on the

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

basis of window and object parameters. This excludes HTML-based systems.

The subsequent closest prior art document is then D9. The screenshots described in D9 and generated at the client end disclose merely a local echo function for letters, i.e. inputted text appears on the screen without delay and presumably correctly formatted.

D9 contains no suggestion that the problem of interest was identified, that the latency in the transfer between different input fields can account for a significant proportion of the latency experienced by the user. A person skilled in the art would therefore – proceeding from D9 – not take any steps which would lead to a reduction in the latency in the transfer between different input fields.

With respect to the applicant's letter of 24 February 2005 (received 3 March 2005), the Examining Authority notes the following:

The wording "substantially without confirmation" in independent claim 1 is unclear and therefore unsuitable for substantiating a difference with respect to the prior art (see also Box VIII of this report).

The applicant argued to the effect that a person skilled in the art would not transmit HTML documents with a transmission method having a reduced number of

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

confirmations. This makes no sense to the Examining Authority.

The applicant's attention is drawn to D7 in the search report, which discloses a transmission method via a connection with high latencies with a reduced number of confirmations (see, for example, page 16, lines 3-5) and in which the method is used for the communication between web server and browser (cf., e.g., figure 2).

With respect to the applicant's letter of 17 June 2005, attention is drawn to the fact that the applicant refers to a document (DE-A-10200165) which is not part of the application and, moreover, was not published until after the priority date of the present application. It is not possible to refer to this document to solve problems of clarity of the present application. Quite apart from that point, the document in question appears to match the case shown in D7. In both documents, TCP connections are converted by a protocol converter to a second transmission protocol that is set to the characteristics of the satellite path and uses a reduced number of confirmations.

In addition, the consequence for HTML forms of the diverse Auto Tabbing solutions is that a plurality of fields can be processed successively without the need for sending confirmations to the server. If Java Script solutions are used, more complex functions can also be carried out autonomously on the client side. A transmission function with a reduced number of confirmations therefore has no identifiable consequences.

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

In the opinion of the Examining Authority, independent claim 1 lacks features that substantiate a technical difference with respect to the prior art. In particular, there are no technical features which exclude the use of HTML-based forms.

The terms terminal server and terminal server client have, as far as the Examining Authority is aware, no meaning that is sufficiently clearly demarcated as to exclude the use of HTML forms.

Box No. VIII	Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The application does not meet the requirements of PCT Article 6 because claims 1, 11 and 16 are not clear.

The wording "substantially without confirmation", which is used in independent claims 1 and 16, is unclear. Likewise, the wording "substantially simultaneously" used in claim 11 is unclear. The wording used in these cases is vague and does not allow the scope of protection sought to be precisely determined or a delimitation with respect to the prior art to be carried out.

Claim 1 contains, in addition, the expression "in particular" in connection with technical features. The precise scope of the claim is therefore unclear. The claim therefore does not meet the requirements of PCT Rule 6.4, according to which special embodiments of the invention should be worded as dependent claims.

In addition, the description in the passage on page 6, line 28 to page 7, line 10 does not appear to contain a technically meaningful teaching. It is not clear how a possible crash of the browser software running on the client could lead to a crash of the data processing program on the server.

With respect to the applicant's letter of 17 June 2005, attention is drawn to the fact that the applicant refers to a document (DE-A-10200165) that is not part of the application and which, in addition, was first published after the priority date of the present application. It is

Box No. VIII   Certain observations on the international application

not possible to refer to this document in order to solve
problems of clarity in the present document.

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